

PROJECT NUMBER : 6503
PROJECT TITLE : Chemical Analysis
PROJECT LEADER : B. M. Handy
PERIOD COVERED : December, 1990

I. ACETYLATED PULP

- A. Objective:** Determine the percent acetyl content on handmade sheets of paper made from different batches of acetylated cellulose.
- B. Results:** A procedure provided by the USDA Forest Products Laboratory was applied to handmade paper sheets made from several batches of acetylated cellulose. Compared to the acetylated cellulose, the papers were lower in acetyl content than the corresponding starting material.
- C. Plans:** To measure the percent acetyl content on the "fines" from the paper making process.

II. METHOPRENE KABAT

- A. Objective:** Determine methoprene in tobacco from stemmeries to support Engineering efforts to assure that the application is within specifications.
- B. Results:** Methoprene on Dryer Exit and Hogshead Core samples from ULT Stemmary Qualification tests continue. Danville and Smithfield have been completed and Lexington is in progress. Build-up from apron and brushes at Richmond LPF were analyzed for methoprene. Kabat from Zoecon was assayed.
- C. Plans:** Continue support as needed.

III. COOPERATIVE LEAF STUDIES

- A. Objective:** To provide analytical support for the cooperative tobacco industry standards program.
- B. Results:** Alkaloids and sugars were determined on 399 tobacco samples from the 1990 S.C. Mammoth Tobacco Test and alkaloids, sugars and nitrogen on 160 flue-cured samples from the University of Florida Harvest Study.
- C. Plans:** Continue analytical support as required.